

2-20-07 - Singh - Shields.TXT

00001

1

2

3

4

5

IN RE: EPHEDRA PRODUCTS)
LIABILITY LITIGATION,)

6

7

Pertains to:)

8

Harbir Singh, et al.)

9

v. Herbalife International)

Communications, Inc. et al.)

10

-----)

11

12

DEPOSITION OF LAWRENCE SHIELDS, M.D.

13

Long Beach, New York

14

Tuesday, February 20, 2007

15

16

17

18

19

20

21

Reported by:

22

JEAN VALERIE GAFA

23

JOB NO. 10158

24

25

00002

1

2

February 20, 2007

3

11:30 a.m.

4

5

6

Deposition of LAWRENCE SHIELDS, M.D.,

7

held at the offices of Long Beach Neurology,

8

736 East Park Avenue, Long Beach,

9

New York, pursuant to Subpoena, before

10

Jean Valerie Gafa, a Notary Public of the

11

State of New York.

12

13

14

15

16

17

18

19

20

21

22

23

24

25

00003

1

2

A P P E A R A N C E S:

3

4

RHEINGOLD, VALET, RHEINGOLD,

2-20-07 - Singh - Shields.TXT

5 SHKOLNIK & MCCARTNEY, LLP
6 Attorneys for Plaintiff
7 113 East 37th Street
8 New York , New York 10016
9 BY: DAVID RHEINGOLD , ESQ.

10
11 GOODWIN PROCTER, LLP
12 Attorneys for Defendants
13 Exchange Place
14 Boston , Massachusetts 02109
15 BY: RICHARD A. OETHEIMER, ESQ.
16
17
18
19
20
21
22
23
24
25

00004

1
2 IT IS HEREBY STIPULATED AND AGREED by
3 and between the attorneys for the
4 respective parties herein, that filing and
5 sealing be and the same are hereby waived.

6 IT IS FURTHER STIPULATED AND AGREED
7 that all objections, except as to the form
8 of the question, shall be reserved to the
9 time of the trial.

10 IT IS FURTHER STIPULATED AND AGREED
11 that the within deposition may be sworn to
12 and signed before any officer authorized
13 to administer an oath, with the same force
14 and effect as if signed and sworn to
15 before the Court.
16
17
18
19
20
21
22
23
24
25

00005

1 shields
2 L A W R E N C E S H I E L D S , M . D . ,
3 called as a witness, having been duly
4 sworn by a Notary Public, was examined and
5 testified as follows:

6 EXAMINATION BY
7 MR. OETHEIMER:

8 (Defendants' Exhibits 1 and 2,
9 documents, marked for identification, as of
10 this date.)

11 Q. Thank you. Good morning,
12 Dr. Shields. My name is Richard Oetheimer. I'm
13 with the law firm of Goodwin Procter, and we
14 represent the defendants in this action,
15 Herbalife International, and Herbalife

2-20-07 - Singh - Shields.TXT

16 International of America, also referred to as
 17 Herbalife?
 18 All right?
 19 A. Yes.
 20 Q. You have been identified as an expert
 21 witness by the plaintiff in this matter,
 22 Mr. Harbir Singh; is that right?
 23 A. Yes.
 24 Q. Retained by Mr. Rheingold's firm?
 25 A. Yes.

00006

1 Shields
 2 Q. And what is the, in general terms,
 3 what did you understand to be the issue that you
 4 were asked to address in your opinions?
 5 A. The causal relationship between the
 6 ingestion of Herbalife and the stroke,
 7 hemorrhagic stroke that this man sustained.
 8 Q. In the parlance we use in legal
 9 terms, specific causation, upon, what caused this
 10 man's stroke; is that right?
 11 A. Yes, or significantly contributed to
 12 it.
 13 Q. Okay. Thank you.
 14 A. I take it we're being recorded.
 15 (Discussion held off the record.)
 16 MR. OETHEIMER: Recorded, I guess,
 17 for your aid.
 18 Q. But also a written transcript will be
 19 prepared that you will have a chance to review
 20 and sign.
 21 A. Yes.
 22 Q. The purpose of my examination today
 23 is to understand, make sure that I understand
 24 your opinions and the grounds for your opinions
 25 as they relate to Mr. Singh's case. I'll try to

00007

1 Shields
 2 be clear in my questions, but please ask me for
 3 clarification if you need to at any point.
 4 All right?
 5 A. I will.
 6 Q. You've done this, I take it, many
 7 times before?
 8 A. I've been deposed a number of times
 9 before.
 10 Q. As an expert witness?
 11 A. Yes.
 12 Q. In fact, I'm going to hand you what's
 13 been premarked here as Exhibit 1 to your
 14 deposition transcript, and I guess the first page
 15 of Exhibit 1 is actually a cover letter,
 16 transmittal letter from counsel transmitting a
 17 copy of your report to my office, but behind that
 18 letter dated December 12th, 2006, is a copy of
 19 your December 4th, 2006 report.
 20 Do you see is that?
 21 A. Yes.
 22 Q. And is that your report for this
 23 case?
 24 A. It's December 4, 2006.
 25 Is that what you said?

00008

2-20-07 - Singh - Shields.TXT

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
00009
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
00010
1
2
3
4
5
6
7
8
9
10
11

Shields

Q. Let's correct it on the record, the transmittal letter from counsel is December 12th?

A. 21st.

Q. Okay, so that I got wrong?

A. Mine is December 4th, 2006.

Q. December 4th, 2006. Thank you.

Is that the only written report that you have prepared for this case?

A. No, I've prepared a report several months earlier, November 14th, 2000 -- wait, yeah, related to the same visit, November 14th, 2005, and I have that report here.

Q. I'm sorry, 2005 or 2006?

A. 2005, and I issued a report on November 16th, 2005.

Q. May I see your November 16th, 2005 report?

A. (Handing.)

Q. Okay, so as you state in your report, you examined Mr. Singh in your office on November 14th, 2005; is that correct?

A. Yes.

Q. And you prepared your November 16th, 2005 report, I take it, shortly after conducting

Shields

that examination?

A. Yes.

Q. And what was your reason for preparing a second report in December 2006?

A. The reason was the language that would be allowed according to a judge's ruling on the case, so I changed the language so it was in accordance with what he would allow.

Q. All right. Did you --

A. And I had a couple of additional documents.

Q. That was going to be my next question.

Did you have any additional information at the time that you prepared your December 4th, 2006 report that you did not have at the time that you prepared your December 16th, 2005 report?

A. Yeah, first of all, the judge's rulings.

Q. I understand.

A. Secondly, I had the fourth amended generic expert report of Stephen Levine, which seemed to give examples of the judge's rulings.

Shields

I had the deposition of Doiner Caragata in U.S. District Court concerning products liability litigation, and I had the deposition of Habir Singh; and I think those are the things that I didn't have prior.

Q. Ms. Caragata, that's C-A-R-A-G-A-T-A, do you understand that to be Mr. Singh's wife?

A. Yes.

Q. And your December 16th report, marked as Exhibit 1, indicates that you've listed her

2-20-07 - Singh - Shields.TXT

12 deposition as one of the materials that you had
13 reviewed?
14 A. Yes.
15 Q. I do not see Mr. Singh's deposition
16 listed in your December 4th, 2006 report.
17 A. Yes.
18 Q. You said a moment ago that was one of
19 the --
20 A. Yes, that was an oversight not to put
21 it on the front page.
22 Q. Not to put it on the front page of
23 the report?
24 A. Yes.
25 Q. Is it referenced anywhere in the

00011

1 shields
2 report?
3 A. Not specifically. I don't think so.
4 Q. But it's your testimony that Mr.
5 Singh's deposition at the time that you authored
6 your December 4th, 2006 report?
7 A. Yes.
8 Q. Do you know whether you had his
9 complete deposition?
10 A. I don't recall.
11 Q. Do you know if you had more than one
12 transcript of his deposition?
13 A. I don't really recall.
14 Q. I say that only because his
15 deposition, for a variety of reasons, ended up
16 being taken over three separate days.
17 A. I seem to remember that, but I don't
18 remember the specifics.
19 MR. OETHEIMER: Off the record.
20 (Discussion held off the record.)
21 (Time noted: 11:40 a.m.)
22 (Recess taken.)
23 MR. OETHEIMER:
24 Q. Let me turn, in your report, which is
25 Exhibit 1 --

00012

1 shields
2 A. which report are you referring to?
3 Q. Exhibit 1 is your December 4th, 2006
4 report?
5 A. Yeah.
6 Q. There is a section towards the back
7 of that behind your curriculum vitae which lists
8 court appearances by Lawrence W. Shields, M.D.
9 Do you see that?
10 A. No.
11 Q. Should be the last four pages of
12 Exhibit 1.
13 A. Oh, yeah.
14 Q. Is that a listing that you prepared?
15 A. It's prepared by one of the people in
16 the office.
17 Q. Okay, one of your employees?
18 A. Yes.
19 Q. I only noted one matter that I could
20 identify in here relating to ephedra. That is
21 your deposition in the case of Sayonora
22 Bhattacharya, B-H-A-T-T-A-C-H-A-R-Y-A.

2-20-07 - Singh - Shields.TXT

23 Do you recall giving any other testimony,
24 either at trial or deposition, in a personal
25 injury case involving a stroke or other injury

00013

1 shields

2 alleged to be due to ephedra or ma huong?

3 A. Ephedra as opposed to PPA?

4 Q. Yes.

5 A. Not that I can recall.

6 Q. Okay.

7 A. There might be another one, but I
8 can't think of it.

9 Q. On the page four of your curriculum
10 vitae, next to the heading "Amassed Court
11 Litigation Experience," you state that you have
12 reviewed and rendered opinions in 500 plus cases
13 of use of ephedra-containing compounds and their
14 potential neurologic complications.

15 Do you see that?

16 A. Yes.

17 Q. Again, I just ask, in 500 plus cases
18 of use of ephedra-containing compounds, you
19 believe you've only testified once?

20 A. Well, in ephedra-containing, I
21 included the idea of PPA.

22 Q. Well, look at your list then because
23 I do see several PPA matters. There's and
24 indication that you gave a deposition in June
25 2003 in a PPA case by the name of Cardenas?

00014

1 shields

2 A. Just so I'm with you, where are you.

3 Q. That is under court appearances by

4 Lawrence Shields, and it is the third page in.

5 And that case involved a ruptured cerebral
6 aneurism?

7 A. Yes.

8 Q. And your opinion was it was PPA
9 related?

10 A. Yes.

11 Q. PPA, for the record is
12 phenylpropanolamine?

13 A. Yes.

14 Q. And on that same page, there's an
15 indication that you gave a deposition in a
16 PPA-related stroke case. The plaintiff was Todd
17 McKinley?

18 A. Yes.

19 Q. So those are two depositions in 2003
20 in PPA cases, correct?

21 A. Yes. That's how they're listed.

22 Q. That's how they're listed.

23 Do you believe the listing is correct?

24 A. I think it's probably correct, but I
25 don't specifically remember.

00015

1 shields

2 Q. I didn't see any other PPA cases
3 listed. Feel free to, in fact, why don't I ask
4 you to review the four-page list of court
5 appearances and just confirm for me that there
6 are no PPA cases other than those two and no
7 ephedra case other than the Bhattacharya case.

2-20-07 - Singh - Shields.TXT

8 (Witness perusing document.)

9 A. That's all I see.

10 Q. And you don't have a recollection, as
11 you testify here today, of any others in which
12 you've given testimony on cases involving either
13 PPA, ephedra or ephedrine?

14 A. I don't have any recollection, but
15 there might be 1 or 2 others.

16 Q. How would you determine if, how would
17 you determine whether, in fact, there are others?

18 A. Well, if I were of a mind to
19 determine it, I guess we'd have to go through all
20 my records for the last few years.

21 Q. I believe the federal rules of civil
22 procedure do require you to identify matters in
23 which you've given testimony, at least for the
24 past four years.

25 The 1 or 2 others that you think are
00016

1 Shields

2 possible, I understand you're not certain, would
3 those be within the past four years?

4 A. I don't know. I don't specifically
5 recall. If I specifically recalled, I could tell
6 you probably even what they were.

7 Q. In the 500 plus cases that you
8 referred to involving use of ephedra-containing
9 compounds, you are including PPA cases in that
10 number, correct?

11 A. Correct.

12 Q. In how many of those 500 plus cases
13 were you retained to provide expert opinions
14 concerning any relationship between
15 ephedra-containing compounds and potential
16 neurologic complications?

17 A. Well, if I understand your question
18 correctly, which I don't think I do, it would
19 probably be smarter for you to ask the question
20 in a way that I could understand it.

21 Q. Let me ask it again, and then perhaps
22 you could tell me what it is you don't
23 understand. I want to know of these, you say you
24 have reviewed and rendered opinions in 500 plus
25 cases of use of ephedra-containing compounds and

00017

1 Shields

2 their potential neurologic complications.

3 And I guess I'm asking you, are you saying
4 you've been retained more than 500 times to
5 provide opinions concerning use of
6 ephedra-containing compounds and their potential
7 neurologic complications?

8 (Discussion held off the record.)

9 THE WITNESS: I don't remember what I
10 was going to say. I don't remember the
11 question.

12 MR. OETHEIMER:

13 Q. Do you want to hear the question
14 again?

15 A. No, it's okay. Not to put too fine a
16 split to this, it depends on what you mean by
17 retained, right?

18 Q. I don't know, but I'm happy to have

2-20-07 - Singh - Shields.TXT

19 you sort of the explain it.
20 A. Well, in every case I was retained to
21 give an opinion.

22 Q. You were retained to review records
23 to form an opinion?

24 A. Yes.

25 Q. Okay.

00018

1 shields

2 A. To me that's retention.

3 You understand why I have a problem with
4 your question?

5 Q. I'm not sure you do. I think you've
6 answered my question.

7 Perhaps you're suggesting in some of those
8 cases, the opinion you formed may not have led to
9 further work?

10 A. Exactly.

11 Q. Can you tell me in what percentage of
12 those cases that you reviewed you were of the
13 opinion that the ephedra-containing compound had
14 played a role in causing or contributing to the
15 neurologic injury?

16 A. I would say most of the time I did
17 not think so, but I can't give you an exact
18 percentage. That's a speculation.

19 Q. Have you ever testified on the
20 defense side of a case involving injury claiming
21 to be due to ephedra-containing compounds?

22 A. No.

23 Q. So you've reviewed various cases, and
24 in some cases you came to the conclusion that you
25 believed there was a causal relationship; and in

00019

1 shields

2 others you came to the opposite conclusion,
3 right?

4 A. Yes.

5 Q. What criteria influenced that
6 determination?

7 A. Which determination?

8 Q. Whether or not you think there is a
9 causal relationship in the particular case, and
10 we'll come back to this case, but just in
11 general, what are the things that you are looking
12 for?

13 A. Can't be generalized. Each case has
14 a particular set of circumstances. The deeper
15 you delve, the more you'll find how more
16 individual each case is. So I would say there's
17 no general rule I could use.

18 Of course, if somebody didn't take the
19 drug, I wouldn't think there could be a
20 relationship.

21 Q. Okay, so exposure, obviously, is one
22 essential criteria?

23 A. One essential criterion.

24 Q. Criterion, thank you.

25 A. You're welcome.

00020

1 shields

2 Q. Does there need to be a temporal
3 relationship between that exposure and the

2-20-07 - Singh - Shields.TXT

injury?

A. It depends.

Q. What does it depend on?

A. Other factors that are involved.

Q. Can you give me examples of what those other factors might be in a given case?

A. Examples in a given case?

You'd have to give me the given case. I'm not being evasive, but I don't want to mislead you or say something that's going to require a lot of qualification, so if you give me a particular case, I'll tell you what I think.

Q. Well, I'm not going to give you a particular case just yet, Doctor.

Differential diagnosis is what we're talking about here?

A. I don't know. You didn't tell me you were talking about differential diagnosis.

Q. Let me ask you, what is the process by which you determine or come to the opinion, whether or not you believe there is a causal relationship in a particular?

Shields

I understand the factors of each case are different, but I assume your process is the same.

MR. RHEINGOLD: Objection to form.

THE WITNESS: Shall I answer?

MR. RHEINGOLD: Yes.

THE WITNESS: What process, what are you referring to?

MR. OETHEIMER:

Q. I don't know. Is there a process by which you determine a causal relationship exists?

A. Yeah, I evaluate the case. I analyze the important factors, and I do do a differential diagnosis. That's the method of diagnosis in neurology and in medicine, and I employ that; and it's also very specifically stated in my report.

Q. Right. I understood that, and --

A. So that's the process, if you want a process.

Q. And as part of that process, I understand each case is different, but part of that process involves understanding what are the facts of this particular case, correct?

A. The facts are very important.

Q. And the exposure would be one of the

Shields

facts?

A. Yes.

Q. And the temporal relationship between the exposure and the injury, would that also be something important to understand?

A. Yes, it's relevant.

Q. And how about the presence of other risk factors for the injury?

A. They have to be assessed. They have to be recognized, and then they have to be assessed in terms of the events that happened.

Q. And to understand the facts of this case, as I understand, you reviewed some of the

2-20-07 - Singh - Shields.TXT

15 deposition testimony?

16 A. Yes.

17 Q. And some of the medical records?

18 A. Yes. I also took a history from the
19 patients, the patient and his wife.

20 Q. Subsequent to when you saw him,
21 subsequent to the stroke, you examined the
22 patient and interviewed him in the presence of
23 his wife?

24 A. I believe his wife was there. Let me
25 see. Yeah.

00023

1 Shields

2 Q. Let's take a moment before we go back
3 to your report and review the documents that you
4 produced. Before I mark these, I'll show you
5 Exhibit 2.

6 Exhibit 2 is a copy of the Notice of
7 Deposition for today's deposition and a subpoena,
8 which requested production of certain documents,
9 and I confess that this was handled by my New
10 York office; and I'm sure David has seen the
11 subpoena. I don't honestly know if you have or
12 you have not?

13 A. I don't recall seeing it.

14 Q. Let me show you what's been marked as
15 Exhibit 2, and after you've had a chance to leaf
16 through it, if you could look at the schedule of
17 documents at the back and tell me whether there's
18 anything that you reviewed about the Singh case
19 that I'm not holding in my hand at this point, at
20 least in terms of paper. I understand you
21 examined Mr. Singh and interviewed him and his
22 wife.

23 A. Well, Number Two is ridiculous, all
24 data or other information considered by you in
25 forming your opinions. We're talking about,

00024

1 Shields

2 let's see, 38 years of experience, and all that
3 goes into data that I use in forming my opinions.

4 Q. Okay. Let me reframe my question.
5 Let's start with specific to the Singhs, if you
6 have anything specific to Mr. Singh and his
7 injury beyond what you've produced here this
8 morning?

9 A. Same thing. I have thousands of
10 articles, thousands of textbooks -- not thousands
11 of textbooks, hundreds of textbooks.

12 Q. I understand, and I understand that
13 those may inform your opinion, but what I want to
14 know, and I guess I would like answered on the
15 record, do you have anything specific to his case
16 other than what I'm holding?

17 A. Well, I prepared a list of references
18 that you're holding.

19 Q. Correct.

20 A. Which I'm not only talking about the
21 selective bibliography in the back of it, but in
22 there, there's a bibliography by category, but
23 that is not limiting. I just put that down to
24 answer some questions that I thought, that I
25 anticipated you would ask. That might be it.

2-20-07 - Singh - Shields.TXT

00025

1 Shields

2 Q. You're referring to, I'll hand it to
3 you?4 A. Yes. It's marked "Bibliography."
5 The first page has alkalization of urine, slow
6 excretion.7 Q. You don't have to do that now, but
8 we'll come --9 A. But this is not the extent of the
10 kinds of things I would consider and have
11 considered. As you must know, there's a
12 literature of, I don't know how many tens of
13 thousands of articles, which bear on the various
14 aspects of a case like this, and I've been
15 reading them since 1968.16 Q. Of course, in the deposition we'll
17 come to that, and I understand that a lot of your
18 personal experience, clinical experience and
19 training is relevant to and forms your opinions
20 in this case. I do believe that defense counsel
21 is entitled to identification of any studies,
22 papers that form, you know, the particular
23 reliance for your opinion, and I do understand
24 that you provided a bibliography in your report;
25 and I'll review this bibliography as well.

00026

1 Shields

2 But I do, for the record, I do object to
3 basically the attempt to broaden the reliance and
4 say that, you know, anything else that's in the
5 world medical literature is fair game for the
6 doctor's opinion because I don't believe that to
7 be the case. You and I don't have to argue about
8 it.9 A. I will argue it because I'm not
10 broadening it. I'll tell you exactly how it
11 works.12 Q. And for the record, I'm going to
13 object to reliance on any study that is not
14 identified in Dr. Shield's bibliography, and
15 that's a determination the judge makes, not
16 myself, or Mr. Rheingold or, respectfully, you,
17 Doctor.

18 A. Okay.

19 MR. OETHEIMER: Let's mark what we
20 have here produced by Dr. Shields. So
21 Exhibit 3, mark as Exhibit 3 a copy of
22 Dr. Shield's previously identified
23 November 16th, 2005 report. We'll call
24 it, for the purpose of the deposition, if
25 I refer to your former report, this will

00027

1 Shields

2 be the November 16th, 2005 report, and the
3 second report will be the December 4th,
4 2006 report, if I don't refer to them by
5 date.

6 MR. OETHEIMER:

7 Q. Okay?

8 A. Okay.

9 (Defendants' Exhibit 3, document,
10 marked for identification, as of this

2-20-07 - Singh - Shields.TXT

11 date.)
12 MR. OETHEIMER: Mark as Exhibit 4 the
13 bibliography that Dr. Shields just
14 identified a few moments ago in his
15 testimony.
16 (Defendants' Exhibit 4, document,
17 marked for identification, as of this date.)
18 MR. OETHEIMER:
19 Q. And this is in addition to the
20 bibliography that's contained in your report?
21 A. Well, some of it is repetitive.
22 Q. Some of it is overlap?
23 A. Probably, most of it, but it's
24 categorized to make it easy.
25 MR. OETHEIMER: I will mark as

00028

1 Shields
2 Exhibit 5, this is another copy of
3 Dr. Shields' December 4th, 2006 report.
4 It appears to have a few handwritten
5 corrections.
6 Let me mark this and I'll show them
7 to you and ask you a question about them.
8 I'll make that Exhibit 5.
9 (Defendants' Exhibit 5, document,
10 marked for identification, as of this
11 date.)
12 MR. OETHEIMER:
13 Q. Dr. Shields, let me show you briefly
14 what's been marked as Exhibit 5.
15 It's another copy of your December 4th,
16 2006 report, correct?
17 A. Yes.
18 Q. And I note that there are a couple of
19 handwritten corrections or annotations in that.
20 Are those in your handwriting?
21 A. Yes.
22 Q. Do you know, are those corrections,
23 and you can compare it to Exhibit 1, are those
24 corrections that you made after your report was
25 issued, or were those corrections that were

00029

1 Shields
2 picked up in the report, do you know?
3 A. These are corrections that I noticed
4 when I read it in preparation for this depo, and
5 what they are is typos and misuse of one or
6 two words. For example, on page two, I
7 substituted product for compound.
8 Q. I think there may be one or two
9 others?
10 A. And I substituted the word "the" for
11 "a," you know, just better English, and then we
12 have "no a," which should have been "on a." It
13 irritates me when I see this. It's my criterion.
14 Q. So --
15 A. I think there's one other one. I'm
16 not sure. I crossed out the word "an alcohol" on
17 page one because earlier we mentioned alcohol,
18 and on page 13, the word "are" is crossed out and
19 "an" is put in, and that's it.
20 Q. Can I ask, can you, are you able to
21 tell me when you did this, when you made these

2-20-07 - Singh - Shields.TXT

22 corrections?

23 A. Well, last few days.

24 Q. So you spent a little time preparing
25 for the deposition?

00030

1 Shields

2 A. Yes.

3 Q. Went back and reviewed your file and
4 made these corrections this your report?

5 A. Yes, I call them corrections of
6 typos.

7 Q. If you had found any substantive
8 errors in your report, would you have also
9 corrected those?

10 A. No, but I would have pointed them
11 out.

12 Q. Are you aware of any to point out?

13 A. No, I'm not aware of any, but it's
14 always possible.

15 Q. Now, why would you have pointed them
16 out but not corrected them?

17 A. Well, because I don't believe in
18 changing documents except for typos. If there's
19 an inaccuracy, I bring it up. I didn't think
20 that the corrections I made were really material,
21 but it just annoys me to read it.

22 Q. Right, and I'm not suggesting that
23 they are, but I was trying to understand in the
24 course of that review, if you had become aware of
25 inaccuracies or errors, you would bring them to

00031

1 Shields

2 my attention?

3 A. Absolutely, and if you know of any,
4 I'd appreciate it.

5 MR. OETHEIMER: We have handwritten
6 notes. There are seven pages here. Mark
7 this as Exhibit 6.

8 (Defendants' Exhibit 6, document,
9 marked for identification, as of this
10 date.)

11 MR. OETHEIMER:

12 Q. Dr. Shields, we've marked as
13 Exhibit 6, your handwritten notes, correct?

14 A. Yes.

15 Q. And I may ask you to take a few
16 moments, but we don't have to do it right now, to
17 read them for me, but let me just ask you right
18 now, were these all made in the course of your
19 examination and interview on November 14th, 2005?

20 A. They were.

21 Q. Before I mark these, let me ask you,
22 there are three typed pages.

23 My assumption is that these also relate to
24 your November 14th, 2005 examination; is that
25 right?

00032

1 Shields

2 A. Well, one of them really isn't. It's
3 all typed.

4 Q. They're typed forms?

5 A. Typed forms. This is part of the
6 examination.

2-20-07 - Singh - Shields.TXT

7 Q. Is part of the examination?
8 A. Yes. We ask the patient to do this.
9 If you want a name for it, we call it the
10 simultagnosia card, simultagnosia card,
11 S-I-M-U-L-T-A-G-N-O-S-I-A, card. That's a term
12 we use.

13 Q. It reflects a neurological
14 examination that you conducted?
15 A. Yes, audited, yes.
16 Q. And the other page is an intake form?
17 A. Intake, and this is general
18 identification of some vital signs.

19 MR. OETHEIMER: I'm going to staple
20 these three pages and ask that they be
21 marked collectively as Exhibit 7. So the
22 intake form will be the first page. The
23 form titled vital statistics will be the
24 second page of Exhibit 7, and the
25 examination record will be the third page

00033

1 shields
2 of Exhibit 7.
3 (Defendants' Exhibit 7, document,
4 marked for identification, as of this
5 date.)

6 MR. OETHEIMER:

7 Q. Then there appear to be several pages
8 of excerpts from the St. Vincent's Medical Center
9 records, and I don't know if these are complete.
10 Let me ask you, Doctor, if you would put
11 them together?

12 A. I don't think they're complete.

13 Q. And I may have the complete records.
14 I'll be happy to show them to you at some point.

15 A. I don't think these are the complete
16 records. It's part of a angio and endovascular
17 surgery report.

18 Q. What do you have, are they separate
19 records from the angiogram?

20 A. Yes, and I have pages one and two of
21 each.

22 Q. You want to hand me the angiogram,
23 we'll make the angiogram records Exhibit 8?

24 A. They call it arteriography.

25 Q. Is that the same thing as an

00034

1 shields
2 angiogram?

3 A. Yes, to me it is.

4 MR. OETHEIMER: Marked as Exhibit 8
5 is the record of the angiogram, and
6 marking as Exhibit 9, the two pages that
7 relate to the endovascular surgery.

8 (Defendants' Exhibits 8 and 9,
9 document, marked for identification, as of
10 this date.)

11 MR. OETHEIMER:

12 Q. And, Dr. Shields, let me hand you
13 what's been marked as Exhibit 9, the endovascular
14 surgery report.

15 There are some notations on Exhibit 9?

16 A. Yes.

17 Q. Are those yours?

2-20-07 - Singh - Shields.TXT

18 A. Yes.
19 (Discussion held off the record.)
20 MR. OETHEIMER: Mark that as
21 Exhibit 10.
22 (Defendants' Exhibit 10, document,
23 marked for identification, as of this
24 date.)
25 MR. OETHEIMER:

00035

1 shields

2 Q. Dr. Shields, I'm going to hand you
3 what's been marked as Exhibit 10, and I stapled
4 three pages together. The first page appears to
5 be a photographic copy of a bottle of Herbalife
6 Original Green Dietary Supplement. The second
7 page appears to be a photostatic copy of the
8 label, 2001 copyright, and then the third page
9 appears to be a copy of a business card of
10 Herbalife Independent Distributor Steve Peterson.
11 I think you can identify if I've correctly
12 identified the exhibit, and then tell me who
13 furnished those two you.

14 A. Number one, you've correctly
15 represented what it is, and, number two, I
16 believe Mr. Rheingold's office sent them to me.

17 Q. Did they send you an actual bottle or
18 just the photograph just as we see it in the
19 exhibit?

20 A. I don't think I have a bottle.

21 Q. So you have the photograph of the
22 bottle, and then a photograph of the label, and
23 did you read the label?

24 A. Yes.

25 Q. And were you able to read it?

00036

1 shields

2 A. I think I had some other labeling
3 material because I don't think I could have read
4 that.

5 Q. Do you know what other labeling
6 material you had?

7 A. I don't recall.

8 Q. And do you know who Mr. Peterson is?

9 A. I don't. I can tell you who I think
10 he is, but I really don't know for sure who he
11 is.

12 Q. I take it you've never spoken with
13 him?

14 A. No.

15 Q. You mentioned, you obviously have
16 testified that you examined Mr. Singh on
17 November 14th, 2005 and interviewed him in the
18 presence of his wife.

19 Is there anyone else that you've spoken to
20 to obtain any of the facts about Mr. Singh's
21 stroke?

22 A. No.

23 Q. Did you, in preparing for your
24 deposition today, did you meet with Mr. Rheingold
25 or anyone from his office?

00037

1 shields

2 A. Yes.

2-20-07 - Singh - Shields.TXT

3 Q. And when was that?
4 A. I think, let's see, Friday, this past
5 Friday.
6 Q. Who did you meet with?
7 A. Mr. David Rheingold.
8 Q. Where was that meeting?
9 A. In his office.
10 Q. In Manhattan?
11 A. Yes.
12 Q. Was anyone present, other than
13 yourself and Mr. David Rheingold?
14 A. No.
15 Q. How long did the meeting last?
16 A. I would say an hour and 20 or
17 30 minutes.
18 Q. Did you review your December 4th,
19 2006 report with Mr. Rheingold at that meeting?
20 A. No, not particularly, I don't think I
21 did.
22 Q. Did you discuss any of the deposition
23 testimony in the case?
24 A. Yes, one aspect of the deposition
25 testimony.

00038

1 Shields
2 Q. What was that?
3 A. When it applied to the written note
4 that you mentioned on top of the angio and
5 neurovascular business, something that I'd
6 forgotten that had been said because, you didn't
7 ask me, but I read the deposition of the
8 neurovascular expert.
9 Q. Dr. Zablow?
10 A. Yeah.
11 Q. I promise you I was going to get to
12 it. I haven't asked you yet.
13 A. I had read that after I had written
14 these reports, but I wrote there was an
15 inconsistency between the two reports. One said
16 there was vasospasm, no, one concluded there was
17 vasospasm, and the other said there was no
18 vasospasm. So that's what that written business
19 referred to and I mentioned it to Mr. Rheingold,
20 and he reminded me that the deposition, the
21 deposed clarified that and he said that there
22 wasn't vasospasm, it was some sort of typo or
23 misrepresentation.
24 Q. So it may have left a word out. In
25 the body of the report it says, "no evidence of

00039

1 Shields
2 vasospasm," but in the impression?
3 A. It says, "vasospasm."
4 Q. And you read Dr. Zablow's deposition
5 yourself?
6 A. Yes.
7 Q. So you're aware he testified that was
8 a typographical error?
9 A. Yes.
10 Q. And in fact they saw no evidence of
11 vasospasm?
12 A. Yes.
13 Q. Do you have any reason to dispute

2-20-07 - Singh - Shields.TXT

14 that?

15 A. No, well, not that particular
16 statement.

17 Q. I'm only asking about that particular
18 statement.

19 A. I believe it was a typo.

20 Q. Can I ask you to read your
21 handwritten note on Exhibit 9?

22 A. It says, "Early vasospasm on angio,
23 angio says no evidence and conclusion says
24 evidence," and the date of the angio, see that?

25 Q. The date there is given as 5/12?

00040

1 Shields

2 A. '03.

3 Q. And do you understand that date also
4 to be in error?

5 A. Procedure date listed above is
6 5/12/03. If that's an error, I didn't know that.

7 Q. I believe, if you read Dr. Zablow's
8 deposition, I think you'll see that he indicates
9 that, in fact, both the angiogram and the
10 vascular surgery were done on May 10th, the date
11 of the stroke. That's just, that 5/12 date is an
12 error.

13 A. I didn't recall that.

14 Q. We can move on from that. I will
15 show you, this is the deposition transcript of
16 Bruce Charles Zablow, taken on January 10th,
17 2007, and I'll direct you to page 19 of the
18 manuscript. Actually, if you want you can start
19 reading at the bottom of page 18 which is in the
20 bottom right-hand corner.

21 A. You want me to read it out loud?

22 Q. No, to yourself. Just calling your
23 attention to the question at the bottom of page
24 18.

25 See it?

00041

1 Shields

2 A. Yes.

3 Q. And do you understand that, in fact,
4 the endovascular surgery, what was done that same
5 day?

6 A. Yes, they're typically done together.

7 Q. And before the surgery was done, they
8 had the angiogram, of course?

9 A. That's how it's done.

10 Q. And prior to that, there had been a
11 CAT scan earlier in the day, correct?

12 A. Yes.

13 Q. Do you happen to know Dr. Zablow?

14 A. No.

15 Q. Do you know Dr. Hirschfeld?

16 A. No.

17 Q. And you mentioned earlier that since
18 that deposition of the treating doctor, the
19 surgeon, was taken on January 10th, 2007, it, of
20 course, was not available to you at the time that
21 you prepared either your first report or your
22 second report, correct?

23 A. That's correct.

24 Q. But since authoring your second

2-20-07 - Singh - Shields.TXT

25 report in December, you've had an opportunity to
00042

1 Shields
2 review Dr. Zablow's deposition?

3 A. Yes.

4 Q. Is there anything in your report that
5 you would change or alter in any way based on
6 review of that deposition testimony?

7 A. No.

8 Q. Before when I asked you do you have
9 any reason to dispute the conclusion made by the
10 treating physicians that no evidence of vasospasm
11 was seen, you said that you do not dispute that
12 specific finding suggesting to me that there are
13 other things that you may wish to dispute.

14 Let me ask you, is there anything that you
15 recollect from reading in Dr. Zablow's deposition
16 that you do challenge or disagree with?

17 A. I don't remember specifically now,
18 but he quoted a few things that were wrong about
19 subarachnoid hemorrhage, and I think it's towards
20 the end, about the incidence or something like
21 that; and I wasn't convinced that what was being
22 called "fibromuscular dysplasia" was
23 fibromuscular dysplasia or could have been, but
24 if I went through it, I could probably pick it
25 apart in a more specific way. But those are the

00043
1 Shields

2 two major things.

3 Q. So one is just incidence levels?

4 A. Yes, just a general statement about
5 how, certainly does not bear on his observations.

6 Q. I understand the distinction you're
7 drawing.

8 And the fibromuscular dysplasia?

9 A. Yes, and also I don't remember the
10 specifics, although I'd be happy to look at it.
11 The issue of tears will come up, and I don't
12 remember exactly what he said about that, but I
13 remember not agreeing with it.

14 Q. I'm certain that that will come up,
15 and we'll have some discussion about that. Let
16 me ask you --

17 A. And there may be more, because with
18 all the materials that generally relate to a
19 subject of this type, I don't think to remember
20 everything.

21 Q. But those are the only issues that
22 stand out?

23 A. That come to my mind.

24 Q. Do you still have Exhibit 1 in front
25 of you?

00044
1 Shields

2 A. Which is Exhibit 1?

3 Q. Exhibit 1 is your report?

4 A. The December --

5 Q. December 4th, 2006.

6 A. Yeah, I have it.

7 Q. We're still on the first paragraph of
8 it.

9 A. The first paragraph.

2-20-07 - Singh - Shields.TXT

Q. First paragraph, we talked about your examination.

You then say that you've also reviewed the following available medical records concerning Mr. Singh?

A. Yes.

Q. You identified St. Vincent's Medical Center 5/10/03 admission record?

A. Yeah.

Q. And I guess I just would like to clarify.

Are you referring to literally an admission report, or are you referring to the entire hospital record of that admission, which may have spanned a month or two?

A. Yes. I had the entire

00045

Shields
hospitalization, as far as I know. I only know the pages that I got, and I abstracted them in my report.

Q. Okay.

A. And the abstraction comes out to just a few pages, but what I abstracted were the things that appeared to me worth abstracting.

Q. But you do believe you had the entire hospital admission, at least everything through, certainly everything from May 10th, 2003?

A. Yes, I believe so, but what you don't get, you don't know that you got, didn't get.

Q. Right.

In fact, let me ask, do you know if you had the CAT scan, do you understand that when he was admitted that day that there was a CAT scan taken that afternoon?

A. Yes, I believe I refer to it; 5/10/03, report of CT scan, incomplete report.

Q. What did you have about that report, because, frankly, I haven't been able to locate it in our copy of the same thing?

A. All I have is "Internal placement of coil in suprasellar cistern to the left midline,

00046

Shields
internal placement of shunt catheter." So this is post surgery, post intervention.

Q. Do you actually have a report, you know, as opposed to a second-hand report?

A. Well, that could only be from some kind of document in the chart, and, obviously, that's all we had from that piece. There are other things that I look for in the chart that I thought would have been done that I didn't see.

Q. Before I ask you about that, I just want to understand whether you actually have the radiology report from a CAT scan?

A. I have this part of it, what I refer to on the top of page five.

Q. That is 8:34 p.m., correct?

A. No. Here is a paraphrase of the original CT scan report. The neurosurgery attending admitting note, which is the first note in my report, a paraphrase of the original CT

2-20-07 - Singh - Shields.TXT

21 scan.
 22 And I don't know, normally, if we quote it
 23 this way, I don't remember it, we did this so
 24 long ago. Normally, if we quote it this way,
 25 it's because we didn't find the CT scan report.

00047

1 shields

2 So we're paraphrasing, we're not paraphrasing,
 3 we're repeating what the neurosurgery attending
 4 said about the CT scan.

5 Q. Could you tell me, is this the
 6 document that I put in front of you a CT scan
 7 report from, looks like 8:30.

8 A. This is the second one.

9 Q. This is the second one?

10 A. Yeah, the second one that I have in
 11 my chart, in my report.

12 Q. Okay, and where is the first one?

13 A. What do you mean?

14 Q. Do you have your chart here, do you
 15 have records from Mr. Singh?

16 A. I don't have them here.

17 Q. Where would they be?

18 A. In storage. So I don't, you know, I
 19 don't recall the specific documents, but what
 20 you're showing me here is the beginning of what I
 21 have as an impression, and we noted incomplete
 22 report, which means that for some reason or
 23 another --

24 Q. And I understand you have a second
 25 report. I was trying to understand whether you

00048

1 shields

2 actually had a report like this at all, a final
 3 report for the --

4 A. I don't recall, but I have to tell
 5 you that on the basis of how this is transcribed,
 6 where we say, "incomplete report," it means we're
 7 missing something, it didn't duplicate it or
 8 something.

9 Q. Right, but we know from this report
 10 later that there was comparison made with the
 11 patient's prior CAT scan of the head at 5/10/03,
 12 performed at 1 p.m. The present examination is
 13 performed at 8 p.m.

14 So there was a CAT scan done at 1 o'clock
 15 that afternoon?

16 A. That's what I'm referencing in the
 17 initial note of my review of selected medical
 18 records on page four. You see about the fourth
 19 line or fifth line, let's see, yeah, fifth line,
 20 CT, diffuse local cistern subarachnoid hemorrhage
 21 greatest in left sylvian fissure, possibly,
 22 illegible, defect in, illegible, fissure."

23 So that was from a handwritten note.

24 Q. All right.

25 A. And then the rest of it is mentioned,

00049

1 shields

2 "Mild to moderate hydrocephalus, no intracerebral
 3 clot, some blood in ventricular system."

4 Q. And by the time of this second CAT
 5 scan report, the surgery had already been done?

2-20-07 - Singh - Shields.TXT

6 A. Yes.

7 THE WITNESS: I'm going to have to
8 take a break. I just want to get a cup of
9 coffee.

10 MR. OETHEIMER: No problem. We can
11 go off the record.

12 (Time noted: 12:36 p.m.)

13 (Recess taken.)

14 (Time noted: 1:07 p.m.)

15 MR. OETHEIMER:

16 Q. One thing I wanted to, as the
17 reporter mentioned off the record at the break,
18 Doctor, I was going to ask you to read your
19 November 14th, 2005 examination and interview
20 notes into the record, since those are
21 handwritten and otherwise we may not be able to
22 read all of your handwriting.

23 Before I ask you to do that, I
24 understand that you, and, again, was this here or
25 in your office in New York, I think I asked you

00050

1 shields

2 and I apologize?

3 A. I think it was here, but normally the
4 report would say. It doesn't say.

5 Q. Just says, "My office"?

6 A. Probably here.

7 Q. Do you maintain more than one office?

8 A. Yes.

9 Q. Where is your other office?

10 A. 42 Broadway, Manhattan.

11 Q. And we're today in Long Beach?

12 A. Yes.

13 Q. So you think it was here, but not
14 certain?

15 A. It usually, my office means here.
16 It's where I am most of the time these days.

17 Q. And Mr. Singh's wife, Ms. Caragata,
18 was present for your interview?

19 A. Yes.

20 Q. Was she present during, as you
21 conducted the examination?

22 A. Yes.

23 Q. And to the extent that you made notes
24 in the course of your examination and interview,
25 the examination notes, obviously, are based on

00051

1 shields

2 your examination.

3 The interview notes, the history you took,
4 did you do anything in your notes to indicate who
5 the source of the information was, whether it was
6 Mr. Singh or his wife?

7 A. No.

8 Q. Did his wife contribute to providing
9 the history that you took?

10 A. Yes.

11 Q. Did Mr. Singh contribute to providing
12 the history that you took?

13 A. Yes.

14 Q. So the information and the history
15 you recorded, you would only be able to identify
16 whether the source of that information was

2-20-07 - Singh - Shields.TXT

Mr. Singh or Ms. Caragata if you have a memory?

A. Correct.

Q. I will now ask you to read your notes, and there are seven pages of notes, which I think you testified earlier were all, all relate to your November 14th, 2005 examination and interview?

A. Yes.

Q. Let me say this, Dr. Shields. I'd

00052

Shields

like you to read your entries. To the extent your made shorthand, you obviously can testify to the long hand version that you've indicated by your abbreviation.

If you want to comment or expand on anything you wrote here, I'll certainly give you the opportunity to do that, but I would like it for the record it to be clear that you're now expanding on what is here.

A. well, I'd like to say something before we start.

Q. Okay.

A. These notes are made to jog my memory, so they might make no sense whatsoever, and I make no claim that they're complete.

They're just so that I can dictate a real note afterwards, okay.

Q. Okay. All right. Understood, and as I said, read the notes, and if you feel anything needs to be put in context or whatever, I'm happy to do that, but just say, this is not written, but I'd like to add, all right?

A. I'll read it off the written, and I'd also like to say one other thing, just to make it

00053

Shields

clear. I skip around when I do this, so I'm going to go in the order that I do it, that I took it.

Q. You're going to proceed in the order that it's written?

A. I write it as I go along, but I like to make it more interesting.

Shall I start?

Q. Yes, please do, and let's, as we finish each page, we'll just announce it?

A. This is page one, and it's dated 11/14/05, and on top it says, "Doina Caragata, wife."

Shall I spell Caragata?

Q. No, we have it in the transcript.

A. Okay, and some of this is abbreviations. "43-year-old right-handed man, St. Vincent's -- St. Vincent's clinic Manhattan, 1 to 2 times every month -- Dr. S-A-T-H-Y, neurologist -- multivitamins E -- stiff joints Tylenol -- for HAS headaches six times Sundays -- acupuncture one time a month back and neck pain various stimuli plus minus help. Dr. Martin Manhattan -- chiropractor one time a month back

00054

Shields

2-20-07 - Singh - Shields.TXT

2 and leg pain," and I can't read what the next
3 word is, "manipulation." Back pain, leg and neck
4 is what it is?

5 Q. Before you go to page two, I just ask
6 you only one question on page one.

7 When you say plus or minus help, can you
8 explain that?

9 A. Sometimes it helps.

10 Q. Okay. Page two.

11 A. Page two, on top it says, "Singh,
12 two. Six months ago stopped one pack a day --
13 times 30 years Allergic to penicillin 10 to
14 15 years -- U.S.A. India -- college literate in
15 English, Hindi, Punjabi sales in jewelry and
16 repair silver -- apartment second floor room,
17 room in apartment -- elevator."

18 Q. Question on page 2; one pack a day
19 smoker times 30 years.

20 The entry above that is stopped six months
21 ago; does that relate to smoking as well?

22 A. I believe so. You have to look at
23 what I actually said in my report.

24 Q. Okay, we'll do that.

25 A. That's what I think it probably

00055

1 Shields

2 means.

3 Q. Page three?

4 A. Page three, "Household ADL wife, wife
5 in Manhattan personally helps wife at work, walks
6 all day naps during -- watches TV -- read with an
7 arrow going down can't concentrate -- computer
8 for fun. No longer drives a car afraid to
9 drive -- can't work no gym 2 to 3 times a week --
10 socialize use of public transportation no cards."
11 That's the end of that page.

12 Q. Just quickly, ADL, activities of
13 daily living?

14 A. Yeah.

15 Q. Page four?

16 A. Let's see. "3 to 5/10/03, Herbalife
17 to lose times two years three green tabs took
18 three times a day Tea in a.m. on day of stroke
19 ambulance to St. Vincent times four." I don't
20 know what follows that. "-- surgery tracheostomy
21 one and a half months in," and the next word is
22 illegible to me. "St. Vincent's times four
23 months rehabilitation Home."

24 Q. Before you turn to page 5, 5/10/03,
25 May 10th, 2003, was the day of Mr. Singh's

00056

1 Shields

2 stroke, right?

3 A. Yes.

4 Q. Do you know what the three before the
5 five relates to?

6 A. No. Remember I said this is just to
7 jog my memory at the time.

8 Q. I know, but it's fair for me to ask
9 you.

10 A. No, sometimes I can't even read it
11 after a few weeks.

12 Q. You don't think that relates to some

2-20-07 - Singh - Shields.TXT

time period from March to May or, and I do not want to put words in your mouth?

A. I don't remember. There's usually an annotation that means something very particular to me at the moment.

Q. "Herbalife to lose," and do you have an understanding as to lose what?

A. Weight.

Q. And the notation times two years, Herbalife to lose weight, do you know if that was information that was provided by Mr. Singh, himself, or by his wife?

A. Actually, one of them said that.

00057

Shields

Q. And you can't say which?

A. No.

Q. Is that also true with respect to the next entry, the reference to three green, that was provided by one or the other, and you couldn't be sure which?

A. Yes.

Q. And tea in a.m. on day of stroke?

A. Yes.

Q. That's an indication that Mr. Singh had drank a cup of tea that morning before his stroke event?

A. Yes, that's what I believe.

Q. Do you know what kind of tea?

A. No.

Q. And do you know who provided that information?

A. I don't recall.

Q. One or the other?

A. Yes.

Q. Do you know if it was caffeinated tea?

A. I don't know.

Q. Do you assume that it was caffeinated

00058

Shields

tea?

A. I do.

Q. You can turn to page five, thank you.

A. Shall I go on?

Q. Yes, please.

A. "CC," which stands for current complaints: "Headaches QD DEN," which means de novo, which means he didn't have them before. "Tylenol right frontal lasts X two hours 6 to 8 or 9 out of 10 Explode --" I don't know what the next thing is. "No," I don't know what the next thing is. "waken from sleep" -- oh, no, that's "no warning, wakens from sleep and phonophobia."

Q. After wakens from sleep, is that p.m.?

A. P.m.

Q. Yeah.

A. Next is "OMS," which means organic mental syndrome, an old fashioned term.

Q. Organic what?

A. Organic mental syndrome. "Memory, -- expression, whines and cry hypochondriacal in

2-20-07 - Singh - Shields.TXT

24 patient." Next is "tinnitus -- hissing AU."
 25 That means both ears. Something on, I don't know
 00059

1 Shields

2 what the first word there is, "CMF -- 8 out of
 3 ten constant 3 or 4 months -- chiro."

4 Q. The subarachnoid hemorrhage that
 5 Mr. Singh sustained was on the left side,
 6 correct?

7 A. Well, he had, the aneurism was on the
 8 left side. Subarachnoid hemorrhage is a general
 9 thing. The blood gets distributed in the
 10 subarachnoid space. He also had interventricular
 11 blood, and he had an effect of the subarachnoid
 12 hemorrhage on the right side of his brain.

13 So, basically, the whole picture
 14 involved both sides of his brain, and the exam is
 15 consistent with that.

16 Q. That's my question, whether the right
 17 frontal location of the headaches he experiences,
 18 whether you attribute that to the sequelae of the
 19 stroke?

20 A. As you phrase the question, I can't
 21 give you the simple yes/no answer, but I will
 22 tell you what I think.

23 Is that okay?

24 Q. Yes.

25 A. Localization of headaches by their

00060

1 Shields

2 position on your head is notoriously misleading,
 3 so I do attribute the headaches to the
 4 subarachnoid hemorrhage and the events
 5 thereafter. The right-sided aspect of it is
 6 nonspecific to me.

7 Okay, to make myself clear?

8 Q. Yes. You can turn to the next page.
 9 Crossed out, it's tough to read the number six
 10 here, but since there were seven pages.

11 A. No, it's number six. Okay, on top,
 12 "Hands numb ulnar fingers C-8 -- Q a.m. sleep --
 13 synostosis, LMF times one year." I don't know
 14 what that word on the next line is, but
 15 "bilateral below knee left hip weak legs since
 16 stroke Upstairs, up steps worse. No interest de
 17 novo depressed suicidal."

18 Q. Now, you're going up to the
 19 right-hand, top right-hand?

20 A. Yes. "Right arm 10 to 12 years
 21 deformity operated playing with friends." That
 22 refers to how he hurt his arm.

23 Q. Okay. Page seven?

24 A. Seven, "Gait poor, headaches six,
 25 motor per separation truncal tilt to the left,

00061

1 Shields

2 right foot splayed out toe tapping two hours
 3 bilateral right and left Radial deviation left,"
 4 something or other. And on top, "BCBRC."

5 Q. What does that stand for?

6 A. Bush, Clinton, Bush, Reagan, Carter.
 7 That's part of the testing to see if he can name
 8 the names of presidents.

2-20-07 - Singh - Shields.TXT

9 Q. Okay, is that right?

10 A. And I write that down because I often
11 forget to ask them, not that I forget the order
12 of the presidents myself.

13 Q. Do any of the things on Exhibit 6
14 relate to the test that's reflected on the third
15 page of Exhibit 7?

16 A. No. That's part of the general
17 neurologic exam, but it's alluded to in my report
18 but is not in these notes.

19 Q. Tell me briefly what this test
20 involves.

21 A. This we call the "simultagnosia card"
22 because it's not a card anymore, but it has to do
23 with testing visual/spatial orientation, which
24 you might call visual agnosia, and we call it the
25 simultagnosia card because of this figure here,

00062

1 Shields

2 which as you might be able to see, hopefully you
3 do, it's a four made of threes. So we typically
4 will ask the patient what numbers do you see and
5 we record the response.

6 This patient only saw threes. That's my
7 notes, threes only, and if the patient doesn't
8 see the four right away, sometimes they'll see
9 33, 333,000, etc., but if they don't see the
10 four, I prompt them, which is, and I say, you
11 don't see the number four there, then they might
12 see it up here, but I point to it. Wait, there's
13 more.

14 And, by the way, most of this reflects
15 right brain function, but not only. This is
16 visual/spatial orientation. The patient is asked
17 the name of what this is, which isn't so
18 important for this, and then to draw it. He can
19 copy it or he can do it his own way.

20 You see what he did. I gave him two
21 shots. It took a long time to get this out and
22 this is imperfect. Then, close your eyes, I ask
23 them to read that and then do it. Whatever his
24 response was, I don't remember what it is
25 offhand, and here's the clock, they have to tell

00063

1 Shields

2 the time that is right.

3 So we have a sample of how he can write,
4 this is a sample of his handwriting. This is a
5 sample of my handwriting and signed and dated.
6 It's part of the -- the fact that he made
7 spelling errors is part of this.

8 Q. Doctor, let me ask you, well, first
9 let me ask, what was your purpose in examining
10 Mr. Singh?

11 A. It's always the same purpose doing
12 neurologic exam, to discover what his neurologic
13 findings are to enable me to understand what
14 happened to his nervous system. So you might say
15 it's to make a diagnosis, but it's more than
16 that.

17 Q. But let me understand this.

18 Put aside the history, which I'll ask you
19 about separately, but the examination itself,

2-20-07 - Singh - Shields.TXT

20 does that, do you rely for, to any degree, for
21 your opinion on what caused the stroke on
22 May 10th, 2003, on the examination that you
23 conducted on November 14th, 2005?

24 A. I don't think you realize how complex
25 a question that is. So the answer is, yes, no,

00064

1 shields
2 and it depends.

3 Q. well, what part, and, again, I'm
4 separating the history because I'll separately
5 ask you whether any of the history that you took
6 from Mr. Singh and his wife formed any part of
7 the basis for your opinion.

8 A. I understand that you'll do that.

9 Q. I'll do that now.

10 Does any of the history that you took from
11 Mr. Singh and his wife on November 14th, 2005,
12 form a part of the basis of your causation
13 opinion?

14 A. well, let's put it this way. The
15 history of determining the cause, which you can
16 learn, you want all of the information of history
17 that you can get, which is not to say the history
18 is a just a recounting of everybody says is
19 written down, but what you extract from that,
20 what's available, what people have said, what the
21 patients tell you, the patient's family tells you
22 and also what's available in medical records.
23 And you extract from that information, which
24 often helps you tell what is going on, and it's
25 usually most useful in determining cause, but

00065

1 shields
2 usually you can figure out the whole story from
3 history, but as neurologists, we're the coma
4 doctors, and we often don't get any history at
5 all, and we have to rely on the exam and other
6 clues.

7 Q. Now, this exam, your examination of
8 the patient obviously occurred two and a half
9 years after the stroke?

10 A. Yes.

11 Q. So tell me, if you would, how, what
12 role your own examination of Mr. Singh, your own
13 physical examination and whatever tests you
14 administered when you saw him, and I take it you
15 only saw him the one time?

16 A. Once.

17 Q. what role does your examination play
18 in assisting you to arrive at your opinions in
19 the case?

20 A. I'd like to answer that question, but
21 it's so broad or vague that I don't really think
22 that I can help you.

23 Q. well, I think --

24 A. I think maybe I could just talk.

25 Q. well, I think you have to respond to

00066

1 shields
2 the questions. Let me ask you, we've looked at
3 your notes, Exhibit 6, and I'll put them back in
4 front of you.

2-20-07 - Singh - Shields.TXT

5 A. You don't have to put them back.
6 Q. And I understand you base your
7 opinion on your clinical experience and the
8 literature and review of the medical records, but
9 I just want to understand, what in your
10 examination of Mr. Singh, what in your
11 examination do you rely on to any degree for your
12 opinions?

13 A. You mean the straight neurologic
14 examination?

15 Q. Well, start with that and I'll ask
16 you if there's more.

17 A. Because I consider the examination to
18 include the history.

19 Q. And that's why I'm separating them,
20 so let's stick with the straight --

21 A. We're talking about straight
22 neurologic examination.

23 Q. For purposes --

24 A. The neurologic examination in some
25 cases, and in this case enables you to tell what

00067

1 Shields
2 deficits the patient has which are reasonably
3 related to the injury he sustained. It also
4 enables you to rule out certain other conditions
5 which may be an alternative explanation for what
6 happened to him. So I think that is a broad
7 answer to your question.

8 Q. Let's be more specific then.

9 Are there any, are there any potential
10 causes that you were able to rule out in
11 Mr. Singh's case, based on your neurological
12 examination?

13 MR. RHEINGOLD: Objection.

14 Causes of what?

15 MR. OETHEIMER:

16 Q. Causes of his May 10th, 2003
17 hemorrhagic stroke.

18 A. Yes, but there are a number of
19 negative things that I didn't observe that rule
20 out conditions that produce strokes, and this
21 kind of stroke.

22 Q. Okay.

23 A. So that would be really involved,
24 understanding what the differential diagnosis of
25 aneurisms and what ruptured aneurisms are. So to

00068

1 shields
2 cut to the chase, to make it a little bit
3 simpler, I didn't see any sign that he had
4 long-term effects of hypertension, and I judged
5 that on neurologic exam, on the main, by having
6 normal fundi, but there's also an infinite number
7 of other things that might be contributory that I
8 didn't observe.

9 For example, he didn't have any of the
10 signs of the connective tissue diseases that can
11 cause a stroke like Marfan's syndrome.

12 Q. Okay.

13 A. You want me to go through the entire
14 list?

15 Q. No.

2-20-07 - Singh - Shields.TXT

16 A. I also observed he was not a woman,
17 as pregnancy can predispose to rupturing an
18 aneurism.

19 Q. Let me turn and ask it the other way.

20 A. So I can go on for a very long time.

21 Q. Identifying things that you did not
22 find?

23 A. Right, but that's what differential
24 diagnosis is all about, eliminating things. So I
25 didn't find any, of course, the biggest thing in

00069

1 Shields

2 a case like this is not finding signs of
3 hypertension. It is a frequent associative
4 condition, but can be quite miniscule with other
5 conditions.

6 Q. And you looked for signs of chronic
7 hypertension and did not find them on
8 examination; is that right?

9 A. Yes, that's correct.

10 Q. Did you have any history from
11 Mr. Singh or his wife concerning hypertension?

12 A. On the history that I received was he
13 never knew of hypertension nor was he a guy that
14 went to doctors.

15 Q. I was going to say, we don't really
16 have any historical blood pressure readings, do
17 we?

18 A. That's why I made the point about his
19 eyebrows because I consider that to be a sign of,
20 the appearance of vessels in the eyes are a sign
21 of vessels in the brain are going to look like
22 because the vessels in the eyes are extensions
23 and very similar to the vessels in the brain.

24 So the way you recognize the presence of
25 chronic hypertension is whether the patient has

00070

1 Shields

2 an enlarged heart, whether the patient has renal
3 problems, whether the patient, renal meaning
4 kidney, or the patient has changes in the
5 eyebrows. Of those three, the best is changes in
6 the eyebrows as being the effects of blood
7 vessels in the brain. Of course, taking the
8 patient's blood pressure is useful, the patient's
9 blood pressure, in an exam of this type is, we
10 always have patients with elevated blood
11 pressures when they come to see me. Neurology
12 exam is scary to them.

13 Q. So white coat syndrome?

14 A. Well, it's worse because we test them
15 and we test them until, for example, on status
16 testing, we test them until they make mistakes to
17 find what they can do, so it makes people
18 anxious.

19 Q. Do you take their blood pressure
20 before you test them or after?

21 A. I usually take it after because I
22 consider a lot of neurologic testing to be
23 provocative. It is provocative.

24 I mean, that's the way you're supposed to
25 do it. So even having an edge when you do the

00071

2-20-07 - Singh - Shields.TXT

1 Shields

2 neurologic exam is useful because anxiety brings
3 out neurological deficits. For example, if we
4 ask a patient to do something and he's doing it
5 all right, I ask him to do it faster. I say
6 can't you do it faster, et cetera.

7 Q. What examination do you do to
8 determine the condition of his retinal vessels?

9 A. Endoscopy, I look at it through an
10 endoscope.

11 Q. Your testimony is that you believe
12 the retinal vessels are predictive of the
13 intercerebral vessels?

14 A. To a large extent. I don't say
15 there's a one to one correlation.

16 Q. I'm just trying to find out if that
17 is generally accepted in the neurological
18 community?

19 A. It's generally accepted among the
20 more sophisticated, and I can give you a
21 reference if you like.

22 Q. I'd will take that reference.

23 A. I don't have it on hand, but I can
24 give it to you tonight.

25 Q. That would be fine. You can, I

00072

1 Shields

2 assume you would like that to go through David.

3 A. In my opinion.

4 Q. If you are able to give it before we
5 leave today, that's fine.

6 A. I know exactly where the paper is.

7 Q. If not tonight, tomorrow is fine too,
8 okay.

9 A. By the way, I'm giving you a very,
10 very specific reference, however, you could find
11 it in any, in any standard textbook of medicine
12 of hypertension and a place you could look is
13 "The American Heart Association Primer of
14 Hypertension," and you look under the section, I
15 think it's called "The Eye In Hypertension," but
16 I'll give you a much more specific reference.

17 Q. I didn't ask you, but you are board
18 certified in neurology?

19 A. I am.

20 Q. And for how long have you been board
21 certified?

22 A. I think it's about, I believe I
23 became board certified in '73, '60 -- '73, '74,
24 in the seventies. I don't recall, but it's
25 sometime in the seventies.

00073

1 Shields

2 Q. Do you have any other certifications
3 other than in general neurology?

4 A. Certification, I'm a member of the, I
5 think I'm a fellow of the American Academy of
6 Disability Evaluating Physicians. I think that's
7 it in terms of certificates.

8 Q. Do they have separate board
9 certification in neurology?

10 A. I don't think they do yet, but you
11 can take a fellowship in it, and I think, I'm not

2-20-07 - Singh - Shields.TXT

12 sure. There was no board up until fairly
13 recently. I think you can become certificated in
14 it now. I am not certificated.

15 Q. Actually, when I asked you about
16 medical records, I don't think I asked you about
17 films, the films themselves.

18 Have you reviewed any of Mr. Singh's
19 radiographic films?

20 A. Personally, no.

21 Q. Is that something that you feel
22 qualified to review and interpret x-ray films?

23 A. Angiography of the brain, yes.

24 Q. How about CAT scan?

25 A. Yes.

00074

1 Shields

2 Q. But you've not seen his CAT scan
3 films or his angiograms?

4 A. I've seen no original imaging.

5 Q. You just relied on reading the
6 reports?

7 A. Yes.

8 Q. Do you want to turn, if you still
9 have your December 4th, 2006 report in front of
10 you?

11 A. I have it.

12 Q. If you want to turn to your case
13 summary beginning partway down on the second
14 page?

15 A. (Witness complying.)

16 Q. You give the history there in the
17 first couple of lines of the case summary, that
18 Mr. Singh, then 41-year-old right-handed man was
19 admitted to St. Vincent's having suffered severe
20 headache with nausea that morning.

21 A. Excuse me, you're leaving out some
22 words. It's okay with me.

23 Q. Okay.

24 A. I don't care, but that's not an exact
25 reading.

00075

1 Shields

2 Q. Let's read it exactly. On
3 May 10th --

4 A. If you want to do it that way, it's
5 fine.

6 Q. "On May 10th, 2003, Mr. Singh, then a
7 41-year-old right-handed man was admitted to St.
8 Vincent's Catholic Medical having suffered a
9 severe headache with nausea that morning."

10 Did I read that correctly?

11 A. Yes.

12 Q. Is that based on your interview or
13 the medical records?

14 A. I don't remember where I got that
15 particular from.

16 Q. How about the next statement, the
17 report that he had passed out and hit his head?

18 A. I believe, I'm not sure where I got
19 that information. I don't see it in the hospital
20 record that I've paraphrased, extracted,
21 abstracted, so, presumably, I got it from the
22 singhs.

2-20-07 - Singh - Shields.TXT

23 Q. Is the head trauma significant at all
24 in terms of your opinion concerning the cause of
25 the stroke?

00076

1 shields

2 A. That's interesting. It's quite
3 likely that the stroke caused -- we're calling
4 this a stroke. Sometimes that's confusing
5 because some people only mean an occlusion as a
6 stroke, but if you mean a stroke can include
7 subarachnoid hemorrhage, that's fine. Just so
8 we're clear that we're both referring to the same
9 thing.

10 Q. Yes. I had been intending to use it
11 that way. Let's back up.

12 By occlusion, you're referring to ischemic
13 stroke?

14 A. Blockage.

15 Q. So I had been using the term "stroke"
16 to include what happened to Mr. Singh, which was
17 a hemorrhagic --

18 A. Subarachnoid.

19 Q. Subarachnoid hemorrhage.

20 A. Right. So here's my answer. With
21 high medical probability, if he fell, he fell
22 because of the subarachnoid hemorrhage, and it
23 was not the cause of the subarachnoid hemorrhage,
24 although it's not impossible in reverse, it's
25 just highly unlikely, given the circumstances.

00077

1 shields

2 Q. And his particular subarachnoid
3 hemorrhage involved the rupture of an aneurism,
4 correct?

5 A. Yes.

6 Q. Could a fall, could trauma to the
7 head rupture an existing aneurism?

8 A. Yes.

9 Q. But you don't believe that's what
10 occurred in this case?

11 A. No.

12 Q. What is that based on?

13 A. General experience, and why would a
14 man like this fall in the first place?

15 He's a 40-something-year-old guy, 41 at
16 the time, healthy, plus the appearance of the
17 aneurism is consistent with him having bled.

18 Q. I'm going to skip over to the next
19 sentence about, we've discussed the head scan
20 already.

21 The head scan done at the hospital
22 revealed a subarachnoid hemorrhage, correct?

23 A. Yes.

24 Q. The neurological consultation --

25 A. Neurosurgical.

00078

1 shields

2 Q. Neurosurgical, I'm sorry. They later
3 recorded a blood pressure of 175/118.

4 That's obviously an elevated reading, but
5 what do you attribute that to?

6 A. The subarachnoid hemorrhage. The
7 nature, sometimes the patient could have normal

2-20-07 - Singh - Shields.TXT

8 or low blood pressure associated with a
9 catastrophic cerebral event like a subarachnoid
10 hemorrhage, but they normally don't, especially
11 the subarachnoids where the blood pressure tends
12 to be elevated.

13 Q. So the fact that his blood pressure
14 was elevated on admission to the hospital, in
15 your view, was not informative with respect to
16 his blood pressure prior to the occurrence, the
17 onset of stroke?

18 A. I wouldn't say it's not of interest,
19 but it doesn't tell you anything, per se, in
20 terms of whether he was hypertensive before.

21 Q. The next sentence states that
22 Mr. Singh had taken Herbalife, there's an
23 asterisk, an ephedra-containing compound on
24 May 10th, 2003, the date of his subarachnoid
25 hemorrhage and had been ingesting this product

00079

1 shields
2 daily for the previous year.

3 what do you recall is the basis of that
4 statement?

5 A. I believe that's what they told me.

6 Q. And they, for the record?

7 A. The Singhs.

8 Q. Referring to Mr. Singh and his wife?

9 A. Yes.

10 Q. When you interviewed them on
11 November 14th, 2005, in your office?

12 A. Right.

13 Q. And the next sentence is that "Mr.
14 Singh used three green pills per twice day per
15 the instructions of the distributor to promote
16 weight loss."

17 A. Yes.

18 Q. Is that also information that was
19 communicated to you during that interview by
20 Mr. Singh and/or his wife?

21 A. No, originally, it appears I
22 misunderstood them, and I thought he was taking
23 three green pills three times a day, and that's
24 what I said in my original report.

25 Q. In your notes or your original

00080

1 shields
2 report?

3 A. I believe in both.

4 Q. I'm handing you what's been marked as
5 Exhibit 3, and I do see, I see that reference.

6 what did you say in Exhibit 3, your first
7 report?

8 A. Isn't this page two?

9 Q. Right.

10 A. What I said was, "He states he had
11 been using three green pills three times a day,
12 per the instructions of the distributor to
13 promote weight loss."

14 Q. And you've now corrected that in your
15 December 4th, 2005 report to make it three green
16 pills twice a day?

17 A. Yes.

18 Q. How did you determine that the

2-20-07 - Singh - Shields.TXT

19 statement in your original report was incorrect?

20 A. On the basis of his sworn testimony.

21 Q. So after you reviewed Mr. Singh's
22 deposition testimony?

23 A. Yes.

24 Q. And based on that testimony you
25 corrected your report to change it from three

00081

1 shields

2 pills three times a day to three pills two times
3 a day?

4 A. Yes.

5 Q. Do you know whether Mr. Singh
6 testified, do you know if he was asked at his
7 deposition that on the day of his stroke he took
8 Herbalife?

9 A. I don't recall that testimony, but I
10 recall being under the impression that he took it
11 on the day of his stroke. I don't recall the
12 testimony per se.

13 Q. To what extent does your opinion on
14 causation depend on Mr. Singh having taken the
15 product that day?

16 A. Well, I think that if he took it that
17 day, it's a clearer situation, but if he took it
18 the day before, I still would attribute the
19 stroke to be significantly contributed to by the
20 use of the medication, the product.

21 Q. What is the half life of ephedra or
22 ephedrine, do you know?

23 A. I know. The half life of ephedrine,
24 or let's say ephedra is a range, but the half
25 life is up to 5, 4 to 6 hours, I would say; and

00082

1 shields

2 that's different for different people. It also
3 depends upon how alkaline your urine is and other
4 conditions, but the general rule that I follow is
5 two and a half is the peak, generally, hours, and
6 five is generally the half life, and
7 understanding that there's variation, standard
8 deviations on either side.

9 Q. Okay.

10 A. That's how I remember all medical
11 statistics.

12 Q. If he had not taken the product that
13 day on May 10th, and I think you said that you
14 believed he was taking three pills two times a
15 day?

16 A. Yes.

17 Q. Morning and afternoon?

18 A. I don't know when he was taking them.

19 Q. Would the product that he took the
20 day before be eliminated from his system by the
21 time he woke up the following morning?

22 A. No, no, because, sorry. The rule of
23 thumb, aside from the peculiar effects that a
24 product like ephedrine, compound like ephedrine
25 has, can have on blood vessels, which can outlast

00083

1 shields

2 its bioavailability in the body, aside from that,
3 the rule of thumb that's used in medicine is the

2-20-07 - Singh - Shields.TXT

effect of a drug is basically gone after five half lives. There, again, there's variation. Could be 4 or 6.

So a day doesn't make that much difference in terms of having some drug around. Of course, it's a lot simpler situation to understand if, in fact, he took it on the day. Easy to, you know.

Q. Do you believe that ephedra, do you believe that ephedra increases blood pressure?

A. It can. You do realize that one of the original uses of ephedra was to increase blood pressure. One of the original uses was to control Stokes Adams attacks.

Q. Ephedra or ephedrine?

A. Ephedrine, but ephedra. We should define these terms because it can lead to confusion and unnecessary jousting later on.

Q. I don't think I'm confused, but I think it does make sense to on the record.

You are using, when you talk about ephedra being used to increase blood pressure, you're talking about the ephedrine pharmaceutical, not

00084

Shields
ma huong, but ephedrine contains alkaloids; correct?

A. It's 90 percent ephedrine present in most cases.

Q. What are the other alkaloids that are present?

A. Pseudoephedrine, PPA, pseudo PPA, meth ephedrine, and Meth PPA and pseudo of each of those.

Q. It's predominantly ephedrine?

A. It's 90 percent ephedrine.

Q. And I do understand, and we'll come back because I do want to understand your thoughts about mechanism and how ephedra works and what effect it has and over what period of time, but at least as to blood pressure, in terms of it creating a --

A. You mean systemic blood pressure?

Q. Correct.

If Mr. Singh did not take ephedra that morning, then it did not increase his blood pressure that morning, correct?

A. It probably would not have. The rule for ephedrine causing sustained increase in blood

00085

Shields
pressure, assuming there's nothing that complicates the situation, is basically 5 to 6 hours is the outside limit, in terms of systemic blood pressure, and you know what I mean by systemic.

Q. I do.

You're distinguishing systemic blood pressure from intercerebral?

A. Well, I wouldn't phrase it that way.

Q. How would you phrase it?

A. I would phrase systemic blood pressure, which is basically a generalized condition affecting blood pressure in your body

2-20-07 - Singh - Shields.TXT

15 in the main versus the pressure in cerebral
16 vessels because that's not the same as cerebral
17 blood pressure, if you know what I mean.

18 Q. I do. Let me follow.

19 what you said a moment ago is that the
20 effect on systemic blood pressure would be on the
21 outside of 5 to 6 hours?

22 A. Yes.

23 Q. So if he did not take the product
24 that day, you would not have expected it to have
25 any effect on increasing the systemic blood

00086

1 shields
2 pressure on the day of his hemorrhage?

3 A. Yes, in a simple situation.

4 Q. Now, let's talk about the pressure in
5 the intracerebral vessels that you referred to in
6 your answer a moment ago.

7 If he did not take the product that day,
8 would you have expected the product to have any
9 effect on the blood pressure in his intracerebral
10 vessels that day?

11 A. In this particular situation, yes.

12 Q. And how would that effect occur
13 without ingestion of the product on the day of
14 the event?

15 A. Because once you start the process in
16 the brain of vasoconstriction, it may potentiate
17 and continue without there being any additional
18 pharmacological effect. So vasospasm or
19 vasoconstriction, if you like, I'll define the
20 difference that's considered to be.

21 would you like me to do that.

22 Q. I would like you to do that.

23 A. Well, first of all, I use them
24 interchangeably, but vasospasm is thought to be a
25 functional constriction, which is a functional

00087

1 shields
2 change, and vasoconstriction is a long-term
3 change, but it doesn't take a long time to
4 develop after vasospasm has injured a blood
5 vessel. So if you keep in mind the difference in
6 the two terms, you realize that the medical
7 literature, the medical understanding recognizes
8 the fact that vasospasm can lead to
9 vasoconstriction, get it, that there can be a
10 functional change that will injure the blood
11 vessel wall to sustain the change, and exactly
12 how that happens varies from case to case, but it
13 can happen, it does happen with ephedrine and
14 products like it.

15 of course, the most notorious is those
16 that were related to amphetamine, which is very
17 clearly understood. I have to take a two-minute
18 break.

19 (Time noted: 1:58 p.m.)

20 (Recess taken.)

21 (Time noted: 2:02 p.m.)

22 MR. OETHEIMER:

23 Q. I think you said before, Doctor, that
24 your understanding was that he took the product
25 twice a day, three tablets twice a day?

2-20-07 - Singh - Shields.TXT

00088

1 Shields
2 A. Yes.
3 Q. But you weren't certain at what times
4 he took it?
5 A. That's correct.
6 Q. I think you indicated that he took
7 it, or some reference that he took it per the
8 distributor's directions?
9 A. Yes.
10 Q. Do you know what time the onset of
11 the stroke was?
12 A. I don't know for sure, but actually
13 it's something that I have given some thought. I
14 know that he was seen by 2:15 on 5/10/03, and how
15 many hours before that this all began, I am not
16 totally clear on.
17 Q. Well, the Cat scan was at 1 o'clock,
18 correct?
19 A. Yeah.
20 Q. So he was in the hospital by late
21 morning or before noon?
22 A. Yes. Exactly when it started, as I
23 said, I'm not really positive.
24 Q. Well, at Mr. Singh's deposition on
25 November 15th, 2006, he testified that "it

00089

1 Shields
2 happened to me like 8 or 9 o'clock, like when I'm
3 talking my shower."
4 Do you recall reading that testimony.
5 A. If you show it to me. I haven't
6 memorized the --
7 MR. RHEINGOLD: Could you read it for
8 the record?
9 MR. OETHEIMER: I'm reading at the
10 bottom of page 344, top of page 345, and
11 it's the testimony of November 16th, 2006.
12 THE WITNESS: Where is it?
13 MR. OETHEIMER: Question is up here.
14 THE WITNESS: And on the next page?
15 Okay, I see it.
16 MR. OETHEIMER:
17 Q. Do you accept that testimony that the
18 stroke happened that morning?
19 A. Yes.
20 Q. 8, 9 o'clock that morning?
21 A. Well, I accept that as being
22 consistent.
23 Q. The onset, consistent?
24 A. Not that it will change anything very
25 much, but that kind of reporting by somebody

00090

1 Shields
2 who's had a stroke is not that reliable, could be
3 a range, and it's certainly clear that by
4 1 o'clock, he had big time signs on the CT scan
5 of having blown his aneurism.
6 Q. And Mr. Singh testifies that the last
7 time he took the product, the Herbalife product,
8 was the day before his stroke?
9 A. Well, that's what he seems to have
10 said there, but from the nature, the same

2-20-07 - Singh - Shields.TXT

restriction, I would say, applies to that kind of history, and also my sense of what he said there was he was sort of confused in that part of the testimony in the sense that being harried and really not knowing precisely.

Q. If his habit was to take the product twice a day at 10 a.m. and 3 p.m., do you believe he would have, in all likelihood, have had the onset of his hemorrhage before 10 a.m. that morning?

MR. RHEINGOLD: Objection to form.

THE WITNESS: And also, the question, as I understand it, doesn't really make sense.

MR. OETHEIMER:

00091

Shields

Q. Let me ask a new question.

Do you believe he had the onset of the hemorrhage before 10 a.m. on May 10th?

A. He may well have.

Q. Do you believe he would have taken the Herbalife product if he was already experiencing a brain hemorrhage?

MR. RHEINGOLD: Objection to form.

THE WITNESS: He may or may not. Don't forget that when you have a brain hemorrhage, there's several different aspects to this; number one, is recognizing that something's happened.

That doesn't mean that that's when it happened, which sort of works in favor of your argument because he could have had it much earlier.

MR. OETHEIMER:

Q. I'm not making arguments, Doctor.

A. I'm thinking out loud for you.

You're asking what the process is.

On the other hand, patients who have subarachnoid hemorrhage are very often confused, so he may well have taken it despite the fact

00092

Shields

that he was ailing. So the bottom line answer to that is I don't know. He may or may not have taken it if he didn't feel good.

Q. Let me ask this:

We can agree that his testimony was under oath that he did not take it that day?

A. Yes.

Q. Does your opinion depend to any degree on his testimony being mistaken on what he himself did?

A. Well, I said before that it wouldn't matter to me in terms of my opinion with regard to the causality, sorry, the causal importance of the use of this medication, this compound, whether he'd taken it the same day or the day before. I think I said that very clearly before.

Q. You did, and I want it clear on the record.

So your opinion does not depend in any way, shape or form on whether or not he took the